MARKET DECISION MAKING FOR ONLINE AUCTION SELLERS: PROFIT MAXIMIZATION OR SOCIALIZATION

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ABSTRACT

The purpose of this investigation is to identify factors in the decision making processes used by online auction sellers to select their online auction sales channel. Examining these decision factors will aid in creating a model of online auction seller channel evaluation mechanisms including economic and social factors and may be used by online auction services and intermediaries to maximize their market potential by increasing the perceived value of the various economic or social factors influencing seller outlet selection. An exploratory survey analysis is used to identify the components that online seller's use for online channel selection.

Keywords: Online auctions, electronic commerce, online seller channel selection

1. Introduction

Electronic marketplaces on the world-wide-web (WWW) are growing rapidly and provide a large and growing source of consumers, with an estimated 544 million Internet users in 2002 [Hahn 2001;Suh & Han 2003]. Businesses are strongly evaluating and flocking to electronic marketplaces as a new or alternate channel for selling goods and providing services [Geyskens et al. 2002;Hitt & Frei 2002;Kazumori 2003;Wolf 2002a]. Online auctions in particular are growing in popularity with an estimated 8.5 billion in profit generated in 2001 and continued growth projected [Stafford & Stern 2002] with over \$15 billion in sales from consumer to consumer auctions estimated in 2004 [Strader & Ramaswami 2002]. Lucking-Reiley [2000] documented the presence of 142 online auction sites in 2000, many of which are no longer in operation. Online auctions provide sellers with the potential for finding new markets and also represent a cost-effective means for businesses to sell-off aging inventory [Bapna et al. 2003].

The largest, most well known online auction providers in the United States are generic providers like eBay, Amazon.com auctions (hereafter Amazon), and Yahoo!Auctions (hereafter Yahoo) which sell a wide range of goods and services [Bapna et al. 2001;Gregg & Walczak 2003]. In addition to generic online auction providers, various specialty online auction markets are evolving and include services such as hospitals electronically auctioning nursing schedules [Grow & Sager 2003], clients electronically auctioning legal cases to lawyers [Vaculik 2003], and numerous other specialty markets [Lucking-Reiley 2000;Pinker et al. 2003]. Online auction providers may be seen as intermediaries between buyers and sellers that are potentially geographically remote. New intermediaries between sellers and the online auction providers are forming and growing rapidly [McDonald 2004;Wolf 2002b], creating a new service market segment. The popularity of online auctions has led many small retailers, who initially explored online auctions as an additional alternate channel, to move their businesses to be solely online and to employ additional staff to handle their volume of online auction and auction generated sales [Siskos & Stevenson 2003;Kettinger & Hackbarth 2004].

Online auctions are still a relatively new sales channel and few studies have been conducted to evaluate the design of and potential for improvement to online auction markets as a sales channel. Most of the completed research has focused on buyer-centric design and buyer behaviors [Ba & Pavlou 2002;Bapna et al. 2001;Bapna et al. 2004;Ockenfels & Roth 2002], with seller behavior-centric research still in its very early stages [Stafford & Stern 2002].

Sellers are being drawn to Internet auctions due to significantly lower entry costs, lower transaction costs, and an extremely large customer base [Bajari & Hortaçsu 2004;Bichler et al. 2002;Gregg & Walczak 2003;Hitt & Frei 2002;Subirana & Carvajal 2000]. However, seller preferences and more specifically their channel selection strategies for utilizing electronic commerce service providers have not received much research attention [Kauffman & Wood 2000]. Electronic seller channel selection represents an important topic for the continued growth of electronic commerce providers, particularly for online auction communities [Geyskens et al. 2002;Massad & Tucker 2000;Reinhardt & Lévesque 2004].

The purpose of this study is to investigate the decision factors used by online auction sellers to select their online auction sales channel. While economics would imply that sellers should attempt to either maximize their profits or minimize their costs [Bajari & Hortaçsu 2004;Krishna 2002], other non-economic factors may also play a significant role in channel selection strategies of online auction sellers. Previous research has indicated a link between sense of community and e-commerce opportunity [Yap 2002]. Three factors given for the rapid development and profitability of online auction markets are: lower entry costs for buyers and sellers, substitution for more traditional market intermediaries and participation in online auctions is perceived by many users as being a fun activity [Bajari & Hortaçsu 2004]. Electronic commerce service intermediaries (e.g., AuctionDrop [McDonald 2004] and Vendio) and service providers (e.g., eBay and Yahoo) need to understand seller channel selection motivations to optimize their channel or intermediary service adoption business strategies.

In this article, an examination of issues that impact seller market selection strategies from an economic perspective is presented. Then an exploratory survey of online auction sellers for the three largest generalized online auction providers in the United States: eBay; Yahoo; and Amazon [Bajari & Hortaçsu 2004], is conducted to explore actual seller market selection strategies. Online auction sellers are assumed to follow two of the theoretical foundations described by Stafford and Stern [2002]: online auction sellers are selective decision makers and the choice to participate in an online auction is influenced by both perceptions and behavioral intention. Analysis of the survey responses indicates that some sellers do not always behave rationally from a purely economic perspective.

2. Factors Affecting Economic Return for Online Auction Sellers

Game theoretic and econometric models are the most frequently used research models for analyzing auctions [Bapna et al. 2003;Klemperer 1999;Milgrom & Weber 1982]. However, these research models commonly ignore the social and behavioral aspects of auctions, which may ultimately play an important part in online auction channel selection strategies [Stafford & Stern 2002]. This section examines factors affecting the monetary return for online auction sellers.

Cost-benefit theories of decision strategy imply that sellers would attempt to maximize their benefit while minimizing their search or decision costs [Chu & Spires 2003]. An online auction seller's net economic benefit from auctions is the sales price from converted auctions minus the costs of doing business through online auction providers, as given in the following equation:

 $\pi = P(i)p - \Sigma$ (costs),

(1)

where P(i) is the probability of the item *i* receiving a bid and p is the closing bid price for the auction.

Both explicit and opportunity costs impact online auction sellers. Explicit costs are the listing fee to have the item listed with other auctions offered through the online auction service provider and transaction fees from auctions that receive a bid above the seller's reserve price. All three of the major general online auction providers examined in this study charge sellers a listing fee and also a closing fee if the item receives a bid higher than the seller's reserve price, though the fees charged by eBay are significantly higher than their competitors [Kauffman & Wood 2000;Park 2002].

Opportunity costs arise because not all auction items will receive bids and, if a reserve price is used to guarantee a minimum return, then reserve price auctions may not receive any bids equal to the reserve price. Although reserve prices are commonly viewed by sellers as a method to increase the final value of the auction, empirical research evidence indicates that reserve prices also reduce bidder participation and subsequently significantly reduce the rate of successful auctions (by decreasing P(i)) [Bajari & Hortaçsu 2003;Vincent 1995]. If an auction item does not sell, the seller is still responsible for payment of the listing fee and may incur additional overhead charges to store the item until it can be sold at a future auction or through other sales channels. Most of the online auction providers allow a seller to re-list their item one time without any additional fee.

Sellers would minimize direct costs by using Amazon or Yahoo over eBay. However, Amazon and Yahoo both have significantly lower conversion rates compared to eBay, which correspondingly increases the opportunity costs for these two auction sites.

A host of other intrinsic and extrinsic factors affect the outcomes of online auctions. Many of these factors are comparable to traditional (non-online) auction formats, while many are unique to the online venue. Factors affecting both P(i) and p from equation (1) are examined below in Table 1, including which specific online auction provider sites if any benefit from the factor and literature references that have examined the impact of specific individual factors.

Factor	$\mathbf{P}(i)$	р	Positive Site Effect	References
Auction Format	+	0	N/A	[Bajari & Hortaçsu 2003;Krishna 2002;Lucking-Reiley 1999;Maskin & Riley 2000;Park 2002;Vulcano et al. 2002]
Bidder Population Size	+	+	eBay	[Bulow & Klemperer 1996;Gregg & Walczak 2003;Kagel & Levin 2002;Mehta & Lee 1999;Vulcano et al. 2002;Wilcox 2000]
Seller Population Size	-	-	Yahoo	[Bichler et al. 2002;Hahn 2001;Judge et al. 1988,Siskos & Stevenson 2003]
Perceived Risk	+	-	All	[Ba et al. 2003;Gupta et al. 2004;Kazumori & McMillan 2003;Mishra et al. 1998]
Rating Mechanism	+	+	All	[Ba & Pavlou 2002;Bajari & Hortaçsu 2003; Bajari & Hortaçsu 2004;Resnick et al. 2000;Strader & Ramaswami 2002;Vishwanath 2004]
Search Costs	-	-	eBay, Yahoo	[Bichler et al. 2002;Hahn 2001;Massad & Tucker 2000; Öörni 2003;Park 2002;Tung 2003]
Bid Timing/Sniping	0	-	Amazon, Yahoo	[Bajari & Hortaçsu 2004;Bapna 2003;Gregg & Walczak 2003;Kazumori 2003;Matsubara 2001;Ockenfels & Roth 2002;Roth & Ockenfels 2002;Schindler 2003;Teich et al. 1999;Wildberger 2003]

Table 1: Factors affecting online auction outcome (+ positive, - negative, 0 = no effect)

Various formats for auctions exist with regard to how bids are tendered and final auction price realized. If entry costs are kept constant across auction formats, which they are in online auctions (with no entry cost for bidders), then participants overwhelmingly prefer the English auction format [Ivanova-Stenzel & Salmon 2004]. The three largest online auction providers all provide the same type of auction formats: English for single items [Park 2002] and Dutch or Vickrey auctions for multiple items [Bapna et al. 2001]. In fact, survey research by Lucking-Reiley [2000] found that 121 of 142 auction sites utilized ascending (English) auction formats and the remainder utilizes first or second price sealed bid formats. Although for the three online auction providers examined in this article the type of auction is not a differentiating factor, previous research indicates that new online auction market entrants need to provide an English-style auction to attract potential bidders [Ivanova-Stenzel & Salmon 2004].

Van Heck and Vervest [1998] indicate that the use of an online auction as a transaction methodology is dependent on having either multiple sellers or multiple buyers or both. From the perspective of increasing seller ROI, when the quantity of potential bidders is increased the probability of having a bidder with a higher valuation and therefore willingness to pay more for the auctioned item is also increased [Bajari & Hortaçsu 2004;Krishna 2002;Segev et al. 2001]. A larger bidder population increases demand and the likelihood of receiving a bid, P(i). Additional research has demonstrated that while the number of auction items listed at eBay is significantly greater than both Amazon and Yahoo, the conversion rate is also significantly higher [Gregg & Walczak 2003;Hahn 2001;Park 2002], ranging from 22 to over 73 percent at eBay (depending on item type) and approximately one fourth of that for the nearest competitor. These historic results indicate that at least for the product categories studied, optimal auction efficiency (or P(i)) is highly correlated with the quantity of bidders.

Reducing competition, or the number of competing sellers with similar products, should lead to higher closing prices [Kagel & Levin 2002;Siskos & Stevenson 2003]. Unfortunately when trying to determine an optimal channel selection strategy, the quantity of bidders available presents a "catch 22". Sellers who desire to maximize efficiency will prefer a site that has the largest quantity of independent bidders [Wilcox 2000]. Bidders will normally choose to frequent an online auction site because they have a large number of items listed in the bidders' categories of interest [Wilcox 2000]. Therefore, the growth of bidder and seller populations are interdependent, creating a circular trap [Wingfield 2001], which implies that economically motivated sellers will have a hard time selecting a smaller online

auction provider with fewer competitors. Fortunately, Hahn [2001] provides empirical evidence that no consistent correlation exists between the number of items being auctioned in a specific category and a reduction in closing values.

Even with no competition from other sellers, which just does not happen in today's electronic marketplace, online auction sellers may still find that their items do not receive any bids (P(i) = 0). This is due to bidder's risk tolerance [Dowling & Staelin 1994;Kramer 1999] and the fact that the geographically distributed and anonymous nature of the internet in general and online auctions more specifically where bidders must rely on item descriptions provided by the sellers [Ba et al. 2003;Kazumori & McMillan 2003] tend to increase perceived risk [Gupta et al. 2004] and subsequently reduce their bids (p) [Bajari & Hortaçsu 2004;Pezanis-Christou 2002]. Several methods exist for mitigating perceived online auction transaction risk.

Sellers should provide clear descriptions and pictures of items to reduce information asymmetry. Additionally, sellers may opt, for an additional explicit cost, to post a price that will award the auction item directly and terminate the auction, that is a "buy price". The use of a buy price enables sellers to treat online auction as a more traditional posted price market [Wang 1993] and can reduce consumer anxiety by indicating what the seller believes is their desired price for the item [Budish & Takeyama 2001].

Most online auction markets also try to assist in reducing risk through the instantiation of a community based rating system [Brinkman & Siefert 2001]. Following a transaction a buyer and seller will rate the other party in the transaction (positive, neutral, or negative) and may leave comments. Typically, though a buyer or seller may leave ratings for multiple transaction interactions, only the first of these ratings is counted. A seller's rating then reflects the cumulative experiences of different buyers from the community of bidders at an online auction site. Online auction rating systems are meant to develop trust between the bidder and seller in these information asymmetry environments. Trust is a critical factor in establishing and maintaining trading relationships [Komiak & Benbasat 2004] and may be a necessary condition in electronic commerce settings [Brinkman & Siefert 2001]. Multiple research studies have indicated that buyer's are willing to pay a price premium (higher p) when bidding on items from sellers with a high rating [Ba & Pavlou 2002;Bajari & Hortaçsu 2003;Resnick et al. 2000;Strader & Ramaswami 2002], though the effect of a positive seller reputation on increased bid values may not be consistent across different categories of items [Bajari & Hortaçsu 2004].

Bidders reduce perceived risk, to increase both P(i) and p in equation (1), through utilization of rating systems and also through information gathering to help reduce the information asymmetry present in online auctions. Online consumers incur time costs when searching for products [Bichler et al. 2002;Massad & Tucker 2000;Levin et al. 2005]. Website navigation ease of use will assist potential buyers in locating products, thus increase P(i) [Hahn 2001;Öörni 2003]. Furthermore, if a consumer perceives increased search capability with no increase in search time, they will continue to use these more familiar and comfortable auction sites [Tung 2003] even when newer sites claim price discounts [Gefen 2003].

Finally, an auction phenomenon that is facilitated by information technology is the presence of a hard end time, meaning that the online auction ends at a precise time regardless of bidder activity, as opposed to extending the auction while active bidding is taking place. "Sniping", or the practice of only entering a last minute bid occurs when hard auction end time exist and has been explained as a rational activity of bidders to soften competition [Bapna 2003;Roth & Ockenfels 2002], which in turn decreases the expected equilibrium closing value for the seller. Various studies have demonstrated increased last minute bidding for hard auction end times by comparing bids for similar products between eBay and Amazon auctions [Roth & Ockenfels 2002] and between eBay and Yahoo [Schindler 2003] and in experimental laboratory settings [Bajari & Hortaçsu 2004;Wildberger 2003]. The eBay auction service only allows hard endings, while Amazon and Yahoo either require or allow extendable endings similar to traditional auctions.

The findings above (highlighted in Table 1) and the direct and opportunity costs, create a confusing decision landscape for online auction sellers. Based on the literature review and observation of each site and comments gathered from discussion groups supported by each site, a 5-point Likert-like scale rating of the profitability and likelihood of selecting each of the three analyzed online auction providers is estimated by the authors and displayed in Table 2 with regard to costs and the other factors discussed above.

From the author's interpretation of the literature and the corresponding evaluation of the costs and factors affecting seller profit presented in Table 2, it would appear that sellers should be selecting Yahoo, assuming an equal weighting among costs and factors. However, all three auction providers have groups of regular sellers. The eBay online auction provider has the highest direct costs [Kauffman & Wood 2000;Park 2002], but also has the largest number of sellers, which in turn increases competition for bidders. The question then is "why do sellers select the sites they do?" A partial information strategy (i.e., one in which a few (possibly one) of the factors in Table 2 dominate the other factors for decision making) could explain the distribution of sellers across multiple

sites. Another explanation is that non-economic factors impact the online auction site selection decision making process.

	eBay	Yahoo	Amazon	Source
Direct Costs (1 = highest cost)	1	4	2	[Kauffman & Wood 2000; Park 2002]
Opportunity Costs (1 = highest cost)	4	2	1	[Gregg & Walczak 2003; Hahn 2001; Park 2002]
Bidder Quantity (5 = most bidders)	5	2	2	[Bajari & Hortaçsu 2004; Gregg & Walczak 2003; Hahn 2001;Krishna 2002; Segev et al. 2001]
Seller Quantity (1 = most sellers)	1	3	4	[Hahn 2001; Kagel & Levin 2002; Siskos & Stevenson 2003]
Risk / Rating System (5 = best rating system)	4	4	3	[Ba & Pavlou 2002; Bajari & Hortaçsu 2003; Resnick et al. 2000; Strader & Ramaswami 2002]
Search Costs (1 = highest search costs)	5	5	2	[Bichler et al. 2002; Hahn 2001; Massad & Tucker 2000; Öörni 2003]
Bid Timing (5 = automatic time extension)	1	3	5	[Bajari & Hortaçsu 2004; Bapna 2003; Roth & Ockenfels 2002;Schindler 2003; Wildberger 2003]
Total Impact (Perceived Value of Outlet)	21	23	19	

Table 2: Comparative rating of costs and other factors for seller profitability at 3 U.S. online auction sites

As an example of a partial information strategy, the very large bidder population at eBay compared to the other two online auction providers produces a significantly higher conversion of auctions into sold items, and consequently increases auction efficiency and significantly reduces opportunity costs [Gregg & Walczak 2003;Hahn 2001;Park 2002]. A total of 73103 auctions ending over a ten-day period for 73 different items are analyzed to confirm eBay's superior auction conversion efficiency. Items included: books, DVD movies, music CDs, digital cameras, zip drives, notebook computers, palm computers, game systems (e.g. X-Box and Playstation 2), beanie babies, and other collectibles. The result of the online auction provider auction efficiency analysis is displayed in Table 3.

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Online Austion Provider	Total open auctions closing during the	Total auctions receiving at least				
Online Auction Flovider	10 day study period	one bid				
eBay	70895	45821 (65 %)				
Amazon	1071	5 (4 %)				
Yahoo	1137	139 (12 %)				

Table 3: Open auction conversion rates for 73 item types at 3 U.S. auction sites

Assuming that sellers are using partial information strategies to select their online auction selling channel, the question of how each seller determines which factors are more relevant than others persists. Parkes [2005] demonstrates that bidders in auction markets find it costly or impossible to explain their elicitation preferences. The same may hold true for sellers with regard to determining selling channel preferences. Furthermore, these preferences may be dynamic and subject to change at any time. Trust [Pavlou & Fygenson 2006, Salam et al. 2005] and security [Suh & Han 2003] have both been identified as impacting consumer acceptance of e-commerce and these factors probably play a role in seller channel selection as well. Other factors may also play significant roles in online channel selection decision making and identification of these factors remains an unsolved problem. Modeling decision making when certain variable values or preferences are uncertain or partially specified is problematic [Yager 1999]. It would therefore be useful to be able to determine the spectrum of selection factors used in selecting online auction channels by sellers.

3. An Exploratory Survey to Model Seller Motivations for Channel Selection

The research reported in this article attempts to identify the critical factors used by online auction sellers when selecting the online auction service to use for selling their items. An exploratory survey is used to elicit seller channel selection behaviors and factors. Prior research on channel selection has focused primarily on established

retailers and conversion to online channels [Reinhardt & Lévesque 2004], therefore examining electronic only channel selection for both B2C and C2C retailers is a needed research topic.

A preliminary model based on the principle that online auction sellers are selective decision makers [Stafford & Stern 2002] coupled with the economic factors described in the previous section is proposed and displayed in Figure 1. In addition to the economic influences discussed in the previous section, trust and security influences are also included in the preliminary model since these are well recognized factors in e-commerce [Pavlou 2003, Pavlou & Fygenson 2006, Salam et al. 2005, Suh & Han 2003]. This preliminary model of online channel selection strategy is used to guide the inquiry into discovering the channel selection factors used by online auction sellers.

Two different techniques are used in this exploratory study. First an exploratory survey to examine the perceived importance of each of the contributing variables for each factor in the model of channel selection influencing factors is developed. This survey is then emailed to sellers that are currently using each of the three U.S.-based online auction providers. The exploratory survey used for eBay sellers is displayed in Appendix A. The Amazon and Yahoo auction seller surveys differed only with respect to the positioning of the online auction provider name in the various questions, with the identified provider for each seller positioned first in the list of choices to remove any answering bias. As may be seen in the survey and is considered common practice in exploratory surveys [Miles 1979], opened ended questions are included (questions 1, 19, and 20) to enable survey respondents to expand upon their channel selection methodology.



Figure 1: Preliminary model of factors influencing online auction seller intention to use a specific channel

The second technique is a review of discussion groups for sellers supported on all three of the online auction provider sites explored in this research. In addition to responding to the survey, some respondents also sent additional emails discussing their experiences with and motivations for using or switching online auction services, providing another source of open ended style responses.

The survey includes the various factors shown in Figure 1, that influence the two primary components of the online auction channel selection model. The survey was administered electronically to sellers through an email invitation to participate in the web-based survey. Online auction seller email addresses were collected utilizing a software agent to crawl each of the three U.S.-based online auction provider websites and scrape seller email addresses. Additional seller email addresses were collected manually and inserted into the distribution list for the survey. Originally, approximately 1600 email invitations to participate in the survey were sent to sellers for each of the three online auction providers, but due to a very poor response rate from eBay sellers multiple mailings to different eBay sellers were used to acquire semi-equal quantities of responses from each online auction provider seller group. The emails sent quantity is discounted by any email addresses that were reported as undeliverable. Demographics for each of the seller groups are given in Table 4.

	Emails sent	Responses	Age	Gender	Education	Mean Seller Type	Use Multiple Providers
eBay	10529	129 (1.23%)	37 ± 14.4	54% Male	3.73 ± 1.55	1.81	10.32%
Amazon	1525	141 (9.25%)	39 ± 12.2	43% Male	3.96 ± 1.37	2.02	52.94%
Yahoo	1541	125 (8.11%)	36 ± 11.8	54% Male	3.49 ± 1.22	2.10	73.50%

Table 4: Seller survey demographics for 3 U.S.-based online auction providers

The response to the age demographic question is a range of values and as such the minimum age for the range is used as the value for each response (with a value of zero used for the under age 17 response). The "use multiple providers" column in Table 4 indicates sellers who gave multiple answers to question 1 in the survey indicating that they currently utilize multiple online auction providers, including online auction providers other than the three listed.

The total number of responses is nearly identical between eBay and Yahoo, but the Amazon sellers provided a slightly larger quantity of responses. At the time of the emailing, the 1525 (actually 1613 were sent, but 88 of the email addresses gathered using the software agent had expired or were otherwise undeliverable and as such were not counted) email addresses for Amazon auctions represented their entire population of active sellers. The eBay and Yahoo email addresses each represent only a portion of the total population of active sellers. The poor response rate from eBay sellers compared to the other two auction provider's sellers may be at least partially attributed to a customer service campaign started by eBay several months prior to the survey email invitation to limit spam being sent to their users (buyers and sellers) in which users had been publicly warned to report spam.

The seller type mean is calculated by treating both professional sellers and sellers extending an offline business by adding an online channel as professional sellers (value = 3). The result indicates that the seller types are fairly uniform across eBay, Amazon auctions, and Yahoo, but that eBay has slightly more casual sellers, which may be a side effect of the large user population and individual registered users deciding to experiment with selling. Additionally, average education appears similar with the quantity of terminal degrees (e.g. Ph.D. or M.D.) being nearly identical, although the Amazon sellers group had a higher overall percentage of college graduates as sellers.

Another interesting result is the percentage of respondents identified for each online auction provider that reported using at least one additional online auction provider. This percentage is noticeably lower for eBay sellers, which provides indirect support that eBay sellers are primarily economically motivated with respect to maximizing auction conversion efficiency and hence there is no motivation to begin or maintain online auctions at less profitable locations. However, a much higher quantity of the Amazon auction sellers and the Yahoo sellers utilize multiple online auction providers, which may indicate that they have mixed channel selection strategies trying to optimize varying requirements.

4. Results and Discussion

4.1. Preliminary Model Validation

The preliminary model of factors influencing online auction channel selection (see Figure 1) indicates that economic factors as well as the reputation of an online auction website contribute to a seller's willingness to list an item at that site. To confirm that the data fits the proposed model, confirmatory factor analysis via structural equation modeling (SEM) analysis was carried out. As the nature of the data is continuous, the authors used maximum likelihood estimation procedure with covariance matrix to analyze the quantitative responses given for question 8 which ask the user to rate the importance of the 5 reputation and 4 economic influencing factors. The procedure was used as it is considered to be theory-oriented, thereby emphasizing the transition from exploratory to confirmatory analysis. Model testing was conducted using Analysis of Moment Structures (AMOS 4.0). The correspondence between theoretical specification and empirical data in a confirmatory factor analysis model is assessed using X^2/df as well as five fit indices: the root mean square error of approximation (RMSEA), the Goodness-of-Fit Index (GFI), the Normed Fit Index (NFI), and Comparative Fit Index (CFI).

The initial confirmatory factor analysis model did not show acceptable model fit based on the goodness-of-fit indices examined, as displayed in Figure 2 [Gefen et al. 2000]. Specifically, the model indicated that Cost did not load well with the other economic factors. This makes sense since cost to list an item can (and often is) completely unrelated to factors generating good final bid amounts. In addition, name recognition did not load as well as the other reputation factors. Both of these factors were dropped from the final CFA model displayed in Figure 3. The revised model demonstrates acceptable fit, confirming that both reputation and economic factors do play a role in online auction sales channel selection.

The modified preliminary model presents a base for online auction sites to use to better understand why a seller chooses a particular auction site. Economic factors were the most significant in the model with a regression weight of 0.58. However, website reputation was almost as important as economic factors, with a regression weight of

0.53. The model shows there is a great deal of covariance between the economic and reputation factors which is reasonable given that site reputation has a great deal to do with the decision to bid and buy at a given site.



Figure 2: SEM analysis of original preliminary online channel selection model

Additional evidence for the effect of economic and reputation factors in the online auction site selection process for sellers comes from examining survey questions 9-18 and 20. While question 8 asked respondents to indicate the importance of various decision factors, question 9 asked users to select the two most important factors in their own decision making regarding online auction site selection and questions 10-18 asked respondents for their perceptions of the relative differences on each of the 9 factors across all 3 of the examined auction providers.

Table 5 displays the responses for question 9 and also indicates the number of respondents that did not enter a value for either the of the two factor importance ratings. It is important to note that the only 2 respondents did not enter any value for questions 9 (one from eBay and one from Yahoo), hence the non-responses are mostly uncorrelated. If a research assumption is made that the eBay sellers group is our base model for comparison, then the Chi-square values (k = 9) for Amazon for the most important factor is 11.43 and for the second most important factor is 28.58, with a .005 significance having a Chi-square value of 23.59 [Sincich 1996]. The corresponding Chi-square values for Yahoo auctions are 111.61 and 30.00 respectively. The Amazon to Yahoo comparison yields Chi-square values of 50.50 and 11.35 respectively. Thus the Amazon seller most important factor is not significantly different from an eBay seller's and the second most important factor between Amazon and Yahoo sellers is also not significantly different, even at the .100 level for both, but all other factor influences are significantly different between the seller groups.



Figure 3: SEM analysis of modified preliminary online channel selection model

	Primary	Non-responses	Secondary	Non-responses
	Importance	for primary	Importance	for secondary
		importance		importance
eBay	Traffic (30.33%)	7 (5.43%)	Traffic (18.03%) & Security (18.03%)	7 (5.43%)
Amazon	Traffic (28.68%)	12 (8.51%)	Cost (19.38%)	9 (6.38%)
Yahoo	Cost (33.68%)	12 (9.60%)	Traffic (17.7%) & Cost (16.81%)	12 (9.60%)

Table 5: List of modes of primary and secondary importance factors for online auction sellers

While the values displayed in Table 5 do indicate a reliance on economic motivators for selecting an online auction site, which is consistent with the SEM analysis of the question 8 responses and the model, it is interesting to note that Yahoo sellers identify with the costs they incur to sell and Amazon sellers identify this as being of secondary importance. The eBay sellers and the Amazon sellers identify the number of bidders (traffic) as being the primary (and also secondary for eBay sellers) factor which is correlated with successful auctions and earning from realized auction sales. However, Table 3 indicates that the Amazon and Yahoo sellers who indicated traffic (as a possible proxy for successful auctions) are incorrect in their assumption since the realization rate of auctions at these sites is at best only 20% of that for eBay.

Further analysis of the perception of relative economic (and reputation benefits) is provided by examining the responses for questions 10-18 which ask the sellers for their perception of the relative qualities of the nine factors in the original preliminary model. The results of this analysis which displays the means and percent difference on 8 of the 9 factors for each seller group is given in Table 6 (the integrity factor is not included due to a bug in the data collection script that caused incorrect data to be gathered for Yahoo sellers on question 16). The mean difference in Likert score is reported as well as the percentage difference of the means between the perceptions of the factors for a seller's auction provider versus the competing providers.

A positive value in the difference score reported in Table 6 indicates that sellers believed their online auction provider to rate better on the corresponding factor than the listed competitor. A percentage difference between perceived rankings by a specific seller group is significant above 12.5 percent. Interestingly, eBay sellers ranked eBay as better on all factors including cost, while Amazon and Yahoo sellers ranked themselves as better on cost compared to all other auction providers, but also indicated that they believed the number of bidders (traffic) and bid amounts would be higher on eBay.

The reliance on minimized costs for transacting business with the online auction providers for Amazon and Yahoo sellers appears to be a legitimate concern, since this topic is frequently mentioned in the online discussion groups, especially at Yahoo as a reason for switching providers. The costs for transacting four identical sales at each of the three studied providers in May 2005 are given in Table 7.

As a first mover, eBay has gained an advantage in name recognition and continues to pursue this advantage through advertising, capitalizing on the reputation factors of online auction channel selection. The power of name recognition and word-of-mouth advertising is reinforced by examining how the various online auction sellers first discovered their corresponding auction providers and how they knew about other providers, from survey questions 5-7. The majority, 76 percent, of eBay sellers learned about eBay through a friend (or word-of-mouth) and the majority of Amazon sellers (63%) and Yahoo sellers (59%) also new of eBay through communication with a friend. This may further support the reputation factor influence in selecting an online auction provider as personal communication from a trusted source could impact the seller's perception of name recognition, reputation, and possibly trust. If this is the case, then the Amazon and Yahoo sellers are discounting this information or it may not directly be effecting their selection criteria which may be more economic or of another category.

The greatest response from Amazon sellers, 41 percent, for how they found the Amazon auction provider is through a link provided on the main Amazon website. Hence they were already browsing on Amazon when they discovered that Amazon provided online auction services. The largest response from Yahoo sellers, 39 percent, indicated that they learned about Yahoo's auction service through an Internet advertisement. This further supports the argument above that either Yahoo sellers were searching for an online auction provider that would satisfy their selection factors or that their selection factors had changed. The fact that they utilized an Internet advertisement decreases the perceived importance of reputation factors since a generic advertisement should not generate the same trust or reputation as a personal communication.

Finally, the last interesting finding from questions 5-7 is that 34 percent of eBay sellers and 26 percent of Yahoo sellers were unaware that Amazon even provided online auction services. Only one seller from Amazon was unaware that eBay provided online auction services. A small quantity of eBay sellers, 18 percent, and 25 percent of Amazon sellers indicated that they were unaware that Yahoo provided online auction services. Again, this points to

name recognition as a possible selection factor and lack of name recognition or knowledge of reputation as a blocking factor from online channel selection.

	*			•		
	eBay sellers	eBay sellers	Amazon sellers	Amazon sellers	Yahoo sellers	Yahoo sellers
	of Amazon	of Yahoo	of eBay	of Yahoo	of eBay	of Amazon
Name	1.478 [†]	1.695 [†]	-0.619 [†]	0.795 [†]	-0.833 [†]	0.396 ^{†††}
recognition	36.95%	42.39%	15.49%	19.87%	20.83%	9.89%
Domutation	0.775^{\dagger}	1.000^{\dagger}	-0.044	0.827^{\dagger}	0.121	0.364 [†]
Reputation	19.37%	25.00%	1.11%	20.66%	3.04%	9.10%
Trust	0.456 [†]	0.751 [†]	0.261***	0.592 [†]	0.341 [†]	$0.287^{\dagger\dagger}$
Trust	11.40%	18.79%	6.53%	14.80%	8.53%	7.19%
Sagarity	0.391*	0.509*	0.305*	0.537 [†]	0.213 ^{††††}	0.187
Security	9.77%	12.73%	7.63%	13.43%	5.33%	4.67%
Traffic (#	1.776 [†]	2.060^{\dagger}	-1.118 [†]	0.664^{\dagger}	-1.554 [†]	0.223
of bidders)	44.40%	51.49%	27.06%	16.60%	38.84%	5.59%
Bid	1.638 [†]	1.770 [†]	-0.953 [†]	0.616 [†]	-1.242 [†]	0.285
amount	40.06%	44.24%	23.82%	15.40%	31.05%	7.12%
Cast	0.213	0.094	1.229*	0.822^{\dagger}	1.666 [†]	1.182 [†]
Cost	5.37%	2.35%	30.73%	20.54%	41.64%	29.55%
Market/	0.989 [†]	1.347*	0.015	0.965*	-0.257	0.297 ^{††††}
Buyer type	24.73%	33.67%	0.38%	24.12%	6.42%	7.42%

Table 6: Perception of relative differences across online auction providers

[†]Values are significantly different at the .005 level with Chi-square value of greater than 18.6.

^{††} Values are significantly different at the .01 level with Chi-square values between 16.82 and 18.6.

^{†††} Values are significantly different at the .025 level with Chi-square values between 14.45 and 16.82.

^{††††} Values are significantly different at the .025 level with Chi-square values between 12.6 and 14.45.

Online Auction Provider	Auction Start Price	Auction Close Price	Listing Fee	Total Fees
eBay	\$1.00	\$5.00	\$0.35	\$0.62
eBay	\$1.00	\$50.00	\$0.35	\$2.35
eBay	\$50.00	\$125.00	\$2.40	\$6.46
eBay	Automobile	N/A	\$40.00	\$80.00
Yahoo	\$1.00	\$5.00	\$0.05	\$0.15
Yahoo	\$1.00	\$50.00	\$0.05	\$0.80
Yahoo	\$50.00	\$125.00	\$0.75	\$2.25
Yahoo	Automobile	N/A	\$5.00	\$20.00
Amazon	\$1.00	\$5.00	\$0.10	\$0.35
Amazon	\$1.00	\$50.00	\$0.10	\$1.98
Amazon	\$50.00	\$125.00	\$0.10	\$3.85
Amazon	Automobile	N/A	N/A	N/A

Table 7: Sample fees (May 2005) at eBay, Yahoo, and Amazon

Returning to the question 9 responses of the two most important decision factors fro selecting an online auction provider (see Table 5), the number of respondents who elected not to answer part of question 9 (from Table 5) may be explained in two ways. Those who answered the primary reason but not the second may only have a single decision making criterion. Another explanation is required for those respondents who indicated a secondary factor, but did not indicate a primary factor and may also apply to some of the other respondents who answered only for the primary factor. It may be that the 4 economic factors and 5 reputation/trust factors do not adequately represent the decision making factors utilized by the seller respondents, which indicates that either additional economic or reputation factors are utilized or that non-economic and non-reputation factors may exist.

Since this is an exploratory study, the majority of the analysis for non-economic and non-reputation/trust factors will come from examining the responses given for the 3 open-ended questions. Before examining these questions though, some further insights may be gained from a comparative view of questions 1 and 2 that examine what other sites have been previously used by the current sellers.

As shown in Table 4, at least some of the sellers from all 3 providers utilize multiple online auction providers for selling their items. However, over half of the Amazon sellers utilize another provider and nearly three quarters of all Yahoo sellers utilize at least one other online auction provider. This may indicate multiple selling criteria, which may include varying criteria for different item types [Bajari & Hortaçsu 2004, Kazumori 2003], though these may all still be economic or reputation oriented, such as placing rarer higher priced collector's items on Yahoo to minimize transaction costs and placing multiple similar items on eBay to reduce inventory through higher auction efficiency.

Table 8 indicates the relationship of current sellers with previous auction transactions. As may be seen from Table 8, the majority eBay and Amazon sellers have had previous experience with their selected online auction provider, though for eBay this prior relationship appears more exclusive. This tendency to remain with a known provider is consistent with Gefen's [2003] claim that once shoppers, or in our case sellers, become accustomed to a specific e-commerce procedure they tend to stay with that provider (or procedure) in order to reduce learning time and possible cognitive dissonance from having to learn a new provider's procedures. Hence, although it does not directly affect initial selection of an online auction channel, "habituation" may end up being a factor for online auction provider continuation. This implies that it will be difficult for online auction providers to attract sellers from other providers unless they can find a way to reduce the seller's anxiety about switching or in some other way compensate them for their learning time [Lee et al. 2003].

Current Site	Previously on	Previously on both	Previously on	Previously				
	Same Site only	Same & Other Site(s)	Other Site(s) only	NOT on any Site				
eBay	73.81%	21.43%	2.38%	2.38%				
Amazon	16.30%	68.89%	11.11%	3.70%				
Yahoo	4.94%	27.16%	67.28%	0.62%				

Table 8: Relationship of Current and Prior Online Auction Site Selection for Selling

Yahoo sellers may end up being loyal to a specific online auction provider as well, but a different explanation for their current switching behavior is needed. It maybe that they just had not yet found the online auction provider that maximized their channel selection factors, such as cost minimization. Alternatively, the Yahoo sellers group may have changed their selection criteria or added new criteria that motivated the switch to Yahoo.

Analyzing qualitative data provides a more precise way to assess causality [Miles 1979] in online auction seller channel selection. The three open ended questions providing qualitative feedback concern: 1) the reason for selecting online auctions as a market channel (question 19), 2) the reason for using multiple online auction providers (question 1), , and the most important for the current research 3) the reason for selecting the specified online auction provider's channel (question 20). Question 20 will serve as the primary focus of the exploratory analysis for discovery of additional channel selection factors. A word count analysis is performed to identify trends and commonalities within the open question responses, following the guidelines given by LaPelle [2004]. Word count analysis examines responses for a set of words or terms that are synonymous to identify both existing and new selection factors. For example, the reputation factor from the preliminary model is identified in responses that contain any of the following words or terms: reputation, name, name recognition, known, aware, or recommended. Responses often contain compound or multiple statements and hence may contain words associated with multiple categories. These multiple factor responses are counted as belonging to each category for which they contain a corresponding word or term.

Responses to the open question regarding the decision to utilize an online auction channel were consistent across all three groups of sellers and are reported in aggregate, with the exception of one category for Amazon auction sellers. The most common reason, with over 55 percent of the responses, that sellers select an online auction channel is to make money or sell unwanted items (including reducing inventory), which corresponds with the economic factor. The second most popular reason given for utilizing online auctions, with just over 24 percent of responses, is the ease of use, being able to sell at any time and from anywhere. Several respondents volunteered that they were retired, handicapped, living in a rural location, or in some other way unable to participate in traditional markets that require availability during specific times or in specific locations. Thus a "convenience" influence or factor may need to be added to the channel selection model to capture this reason for participating in online auctions in general.

Thirdly, with almost 21 percent of the responses, sellers indicated that their decision to utilize an online market channel is based on the ability to reach a very large and worldwide customer base, which again corresponds to an economic factor, traffics. Other factors including entertainment/hobby, the type of item being sold, and security each had a less than 5 percent hit rate, with the exception that if the word "book" is counted only in responses from

Amazon auction sellers, then the market or customer type factor response rate for Amazon alone rises to 22 percent. This raises the question if the type of market or type of buyer present at an online auction may in fact not really be an economic factor, but instead a social factor, where sellers are trying to connect with a certain population demographic that may be otherwise unavailable.

Reasons given for utilizing multiple online auction markets included: specific client or item type, greater exposure, increased sales, reduced fees, convenience, need for a more liberal market place, and others. The three factors that yielded response percentages above 9 percent are: greater exposure and reduced fees both at 30 percent, and the desire to reach specific types of clients or sell specific types of items at 28 percent. One respondent stated: "There are definite differences in the types of buyers on each site. By selling in the various venues, I am able to reach a larger variety of buyers." Greater exposure of items listed in multiple selling channels is expected. The desire to sell or the perception that selling specific items to specific customers, such as auctioning books to Amazon users may correspond to a perception that although Amazon auctions lists a variety of items, the efficiency of this marketplace is in a niche market segment. Additionally, as stated before, Amazon sellers may be looking to sell to a particular type of client, perhaps one that is intellectually stimulated since they are on a site viewed primarily by the public as a book vendor site and as such may be trying to establish a sense of community.

Sheth et al. [1991] state that consumer choice is a function of various consumption values including social and emotional values (in addition to functional epistemic and conditional values). If online auction sellers are viewed as consumers of online auction provider services, then social and emotional values consequently should be included in any model of channel selection. Both convenience and a sense of community have arisen as contenders for personal and social factors influencing online auction channel selection.

The categories and response rates for the open question of "why did you choose the auction site you sell on" is displayed in Table 9. Again, because of compound/multiple answers to this open question the cumulative results in every column are greater than 100%.

Consistent with the quantitative analysis, from Table 9 eBay sellers appear to be motivated economically, going with the recognized name. Reputation and name recognition are lumped as a single category of response due to the high similarity of the terms used to identify these factors in the word analysis.

Table 9 indicates that Amazon auction sellers appear to equally value the name recognition of Amazon, though this does not appear to translate to their auction service given the bid rates shown in Table 1, and the type of marketplace and type of bidders expected at a book selling institution such as Amazon. Although it has a direct economic benefit if a buyer may be found for a particular type of item, the type of buyer may be considered a contributing component to a social factor in channel selection strategies due to the sense of satisfaction gained from participating in a specific (possibly niche) market.

	eBay	Amazon	Yahoo
Reputation/Name recognition	59.29 %	33.33 %	30.00 %
Traffic	38.05 %	13.33 %	23.00 %
Highest Bids/Income	10.62 %	0 %	0 %
Ease-of-use	5.31 %	20.00 %	19.00 %
Security	5.31 %	6.67 %	5.00 %
Low rates	2.66 %	13.33 %	41.00 %
Advertising	1.77 %	0 %	0 %
Market efficiency/Conversion	0.89 %	13.33 %	5.00 %
Market type/Buyer type	0 %	33.33 %	0 %
Sense of community	0 %	0 %	6.00 %
Fairness/Responsiveness	0 %	0 %	5.00 %

Table 9: Open Question Response Rates for Online Auction Market Selection at 3 U.S. online auction providers

Affiliation with a group is a strong motivator of intentional behavior [Baumeister & Leary 1995] and a sense of similarity with a group increases self-esteem [Leary et al. 1998]. Fear, or a lack of trust, may also be reduced through group affiliation [Lang 2004] including virtual communities. The desire to associate with a specific quality of buyer is based on the attraction paradigm which states that people prefer to associate with others that have similar qualities [Chatman et al. 1998;Crocker et al. 1987]. Similarities may include ratings, education, or simply membership in a specific online auction community. The perceived opportunity for interaction with other online auctioneers, especially if similarity with the community is recognized, may serve as a channel selection motivator and may also serve to reduce perceived risk in online auction transactions. The word-of-mouth acquisition of

knowledge about a specific online auction provider from a trusted source may further influence the identification of similarity with a virtual community [Lang 2004;Yap 2002]. This desire to have a certain type or quality of buyer may produce a virtual community or sense of class distinction from the "common" marketplace offered by other online auction providers [Koh & Kim 2003].

Yahoo sellers, from Table 5, are economically motivated, but through the cost (minimization) factor instead of a market efficiency or net return aspect of the online auction marketplace. The open ended question word analysis confirms this finding with an overwhelming number of responses being cost related. Although not considered to be the most significant reasons for selecting Yahoo as an online auction provider, the two categories of responses that are given by Yahoo sellers that are not present for the other two sellers: fairness and sense of community, merit further examination.

A random sample of 32 seller's (who were independent of the sample used for the survey) information provided via their "About Me" pages available through the Yahoo auction website and discussion groups on Yahoo auction reveals that many sellers using Yahoo are also eBay members or were previously eBay members. These sellers frequently (41 percent of the random samples of About Me pages) complain about the high fees charged by eBay and also (22 percent) the unresponsiveness or unfair treatment received at eBay. A smaller percentage of users (9.37 percent), again via random sample of About Me web pages, indicated that they enjoyed ongoing conversations with members (buyers) they have made contact with through their auctions and how they enjoyed this auction community.

Although the primary decision factor for Yahoo sellers is economic (lower costs) there appears to be a small portion of the seller population that utilizes a more social based factor. Although only 6% of the respondents indicated a sense of community as a reason for utilizing Yahoo for auctions, this is still one of the top 5 comments given out of 11 possible categories of responses. These social benefit seekers may live in isolated communities or in other ways require higher social interaction than they are physically or geographically capable of and the growing online auction community provides a new medium for social interaction [Alge et al. 2003;Indeok et al. 2004]. 4.3. Implications and Discussion

As described above, the open ended questions reveal a number of possible additional factors that should probably be included in any online auction seller channel selection model and possibly e-commerce channel selection models if they share the community sense of online auctions or offer C2C type commerce opportunities. These new factors are convenience, ease of use, fun (or entertainment), and community (for interaction opportunities), with a possible reclassification of the market type as both an economic and a social factor due to the possibility of increasing the perception of similarity between individuals and the development of a sense of community. Figure 4 displays a possible new online auction seller channel selection model created from these discovered factors from the exploratory survey and discussion group analysis and is presented for visualization purposes only.

The model proposed from this exploratory research will hopefully serve as a basis for future e-commerce channel selection model development. Consequently, confirmatory analysis is needed in the future to validate the contribution of the newly proposed factors to actual online channel selection performance. The purpose of the displayed model is to show how the newly discovered factors from the exploratory survey would fit into the preliminary model. Note that the Cost factor has been re-introduced after it was deleted in the modified preliminary model following the SEM analysis based on its strong presence in the Yahoo seller responses and slightly less in the Amazon responses to question 9.

The personal factors are those that affect an individual's feeling of well being or comfort with utilizing a specific online auction (or more generally an e-commerce) provider. Convenience will typically include being able to sell to geographically remote consumers, the ability to make sales when the individual seller is geographically remote, and the ability to conduct business at any time of the day and any day of the week, as well as other capabilities that facilitate the seller's ability to participate in e-commerce beyond what is available locally. Ease of use or learning affects the personal time of a seller engaged in learning the methodology of a new sales channel and could be seen as more of a factor for decisions to switch or add additional online sales channels. Finally the last personal factor of fun or entertainment value will be more of a factor for individual C2C sellers as opposed to businesses using online auctions as their sales channel or as an alternate sales channel. The entertainment aspect of channel selection strategies is supported by the responses to the open questions in the survey in which 4.9 percent of the total responses from all sellers indicate that entertainment or as a hobby was the reason that sellers chose to participate in auctions using an online channel, with 57 percent of these hobbyist sellers using eBay.

The social aspect of perceiving a virtual community is noted particularly for yahoo based sellers from their responses to the open question and also from analysis of online discussion groups. The sense of belonging to a particular community or group will facilitate the growth of trust which in turn should increase the amount buyers are

willing to bid [Ba & Pavlou 2002; Bajari & Hortaçsu 2003; Komiak & Benbasat 2004]. The perception of the virtual auction community may be more social interaction oriented (as it appears is the case in the Yahoo seller perceptions) or an identification with a peer group, which may be more likely in the Amazon seller group.

The non-aggregation arc across the connection arrows from the individual influences into the 4 major factors and from the 4 factors into intent to use is meant to represent a choice paradigm where one or possibly multiple (but not all) of the individual influences will dominate an individual seller's selection decision. A non-aggregated combination method is meant to define any method that does not rely on a combination of all possible input vectors and may include a winner-take-all selection strategy or some other smaller combination that excludes specific values dependent on the individual seller. This should be apparent from the primary influence of bidder traffic and provider name recognition for eBay sellers (see Tables 5 and 9) as opposed to provider name recognition and buyer type for Amazon sellers and transaction costs and sense of community for Yahoo sellers.



Figure 4: Revised exploratory model of online auction seller channel selection factors

Other than serving as a discovery mechanism for needed changes with respect to additional influencing factors in seller channel selection model research, what other benefits may be derived from the results of the exploratory study on a more practical application level. Two benefits to online auction providers may be realized. The first is to recognize that the economic motivators for their active sellers varies across online auction providers. Many new entrants into the online auction provider marketplace realize this and try to capture the cost sensitive sellers by offering extremely low comparative listing and closing fees, including offering free listings (e.g., Bidville.com). However, auction providers must realize that this will only entice a subset of the total seller population, since others emphasize bidder traffic or auction conversion ratios.

Additionally, from the responses to questions 10-18 shown in Table 6, although auction cost information and conversion ratios are readily available on the web, many sellers do not utilize this information since eBay sellers indicated that they believed eBay had the best transaction costs of the 3 studied online auction providers when in fact they have the worst. Thus, a targeted marketing plan to advertise the lower transaction costs compared to more expensive competitors might succeed in allowing sellers to make a more informed decision and select the online auction provider that maximizes their dominant channel selection factors.

The second benefit is the realization that non-economic factors, such as interacting with specific buyer types or developing an interactive community are desired benefits by many sellers. Providers such as Yahoo should capitalize on this by augmenting the virtual community interaction opportunities available to members and subsequently advertising these non-economic qualities of their sites to attract sellers (as well as bidders) that place an emphasis on these non-economic factors. Additionally, the entertainment value factor for many online sellers could be addressed by advertising online auction sites as a "safe and fun" environment. Generally, online auction providers and new entrants need to realize that they should not only try to establish positive economic and reputation factor influences, but also try to maximize one or more of the personal and social factors that appear to influence seller channel selection.

Finally, the survey responses to questions 5-7 revealed that all sellers were aware of eBay as a potential sales channel but that 14.68 percent of all respondents did not know that Yahoo offered auctions and 19.25 percent of all respondents did not know that Amazon offered auctions. These auction providers need to establish greater name recognition to improve their reputation factor influence on seller channel selection in addition to the economic and social and personal factors they elect to emphasize.

5. Conclusion and Future Research

The exploratory research reported in this article is aimed at discovering the factors that affect online auction channel selection. A more traditional economic and reputation or trust based preliminary model is developed and validated using SEM analysis to show that economic and reputation factors do affect channel selection strategies for online sellers, however the word count analysis of open ended questions in the exploratory survey reveal that personal and social factors also influence the selection and retention strategies of sellers. Furthermore, it appears that each online auction provider's sellers use different channel selection strategies, only some of which are economically motivated. In the 1953 movie *Gentlemen Prefer Blondes* (see http://www.script-o-rama.com/movie_scripts/g/gentlemen-prefer-blondes-script-transcript.html), Marilyn Monroe's character says "I hate to think where you'll wind up. You're wasting time on unrefined persons without money," to which Jane Russel's character replies: "Did it occur to you that some people don't care about money?" Online auction providers need to keep in mind this heuristic that different economic factors motivate different sellers and that many sellers also have non-economic and non-reputation factors that are considered important to them in online market channel selection.

A potential new model for online channel selection has been proposed that incorporates social and personal factors in addition to the more traditional economic and reputation-based factors. Other research has implied the behavioral nature of e-commerce decision making [Geysken & SteenKamp 2000;Sheth et al. 1991;Stafford & Stern 2002] and this exploratory research has attempted to identify the elements involved in more behavioral factors of decision making. This proposed model needs future research work to confirm the contribution of the proposed additions for channel selection, moving the research from an exploratory stage to a confirmatory stage [Conway & Huffcutt 2003]. Such confirmatory analysis would need specific surveys that will accurately evaluate each factors contribution and include a larger population of current online auction sellers.

One of the limitations of the presented research is that it focuses on online auction provider sites based in the U.S. and future research would need to explore the validity and applicability of these factors in more global settings. Many online auction providers including eBay and Amazon have international sites in addition to their U.S. based site and other online auction providers are based outside of the United States. Different social and personal influences might impact sellers from different international communities due to differing cultural, economic, and political influences in their lives and the capture of these factors would serve to improve the more global application of the proposed online seller channel selection model through the definition of additional personal and social factors.

Once social and personal factors are confirmed, the addition of these factors into other e-commerce buyer and seller models, especially any that involve individuals: C2B and C2C selling (possibly B2C). Hopefully the research reported in this article demonstrates the efficacy of utilizing factors in addition to traditional economic and trust-based factors when modeling online auction and possibly more general e-commerce decision making.

REFERENCES

- Alge, B.J., C. Wiethoff, and H.J. Klein, "When does the medium matter? Knowledge-building experiences and opportunities in decision-making teams," *Organizational Behavior and Human Decision Processes*, Vol. 91, No. 1: 26-37, 2003.
- Ba, S. and P.A. Pavlou, "Evidence of the Effect of Trust Building Technology in Electronic markets: Price Premiums and Buyer Behavior," *Management Information Systems Quarterly*, Vol. 26, No. 3: 243-268, 2002.
- Ba, S., A.B. Whinston, and H. Zhang, "Building Trust in Online Auction Markets through an Economic Incentive Mechanism," *Decision Support Systems*, Vol. 35, No. 3: 273-286, 2003.
- Bajari, P. and A. Hortaçsu, The winner's curse, reserve prices, and endogenous entry: empirical insights from eBay auctions, *RAND Journal of Economics*, Vol. 34, No. 2: 329-355, 2003.

- Bajari, P. and A. Hortaçsu, "Economic Insights from Internet Auctions," *Journal of Economic Literature*, Vol. 42, No. 2: 457-486, 2004.
- Bapna, R., "When Snipers Become Predators: Can Mechanism Design Save Online Auctions?," Communications of the ACM, Vol. 46, No. 12: 152-158, 2003.
- Bapna, R., P. Goes, and A. Gupta, "Insights and Analysis of Online Auctions," *Communications of the ACM*, Vol. 44, No. 11: 42-50, 2001.
- Bapna, R., P. Goes, and A. Gupta, "Replicating Online Yankee Auctions to Analyze Auctioneers' and Bidders' Strategies," *Information Systems Research*, Vol. 14, No. 3: 244-268, 2003.
- Bapna, R., P. Goes, A. Gupta, and Y. Jin, "User Heterogeneity and its Impact on Electronic Auction Market Design: An Empirical Exploration," *Management Information Systems Quarterly*, Vol. 28, No. 1: 21-43, 2004.
- Baumeister, R.F. and M.R. Leary, "The need to belong: Desire for interpersonal attachments as a fundamental human motivation," *Psychological Bulletin*, Vol. 117: 497-529, 1995.
- Bichler, M., J. Kalagnanam, K. Katircioglu, A.J. King, R.D. Lawrence, H.S. Lee, G.Y. Lin, and Y. Lu, "Application of flexible pricing in business-to-business electronic commerce," *IBM Systems Journal*, Vol. 41, No. 2: 287-302, 2002.
- Brinkman, U. and M. Siefert, "Face-to-interface The establishment of trust in the Internet: The case of e-auctions," *International Journal of Sociology*, Vol. 30: 23-47, 2001.
- Budish, E.B., and L.N. Takeyama, "Buy prices in online auctions: irrationality on the internet?," *Economic Letters*, Vol. 72: 325-333, 2001.
- Bulow, J. and P. Klemperer, "Auctions versus negotiations," *American Economic Review*, Vol. 86, No. 1: 180-194, 1996.
- Chatman, J.A., J.T. Polzer, S.G. Barsade, M.A. Neale, "Being different yet feeling similar: The influence of demographic composition and organizational culture on work processes and outcomes," *Administrative Science Quarterly*, Vol. 43, No. 4: 749-780, 1998.
- Chu, P.C. and E.E. Spires, "Perceptions of accuracy and effort of decision strategies," *Organizational Behavior and Human Decision Processes*, Vol. 91: 203-214, 2003.
- Conway, J.M. and A.I. Huffcutt, "A Review and Evaluation of Exploratory Factor Analysis Practices in Organizational Research," *Organizational Research Methods*, Vol. 6, No. 2: 147-168, 2003.
- Crocker, J., L.L. Thompson, K.M. McGraw, and C. Ingerman, "Downward comparison, social prejudice, and evaluations of others: Effects of self-esteem and threat," *Journal of Personality and Social Psychology*, Vol. 52: 907-916, 1987.
- Dowling, G.R. and R. Staelin, "A model of perceived risk and intended risk-handling activity," Journal of Consumer Research, Vol. 21: 119–134, 1994.
- Gefen, D., "TAM or Just Plain Habit: A Look at Experienced Online Shoppers," *Journal of End User Computing* 15 (3), 2003, pp. 1-13, 2003.
- Gefen, D., Straub, D. and Boudreau, M. "Structural equation modeling and regression: Guidelines for research practice," *Communications of the AIS* (4:7), October 2000, pp. 1-79.
- Geyskens, I., K. Gielens, and M.G. Dekimpe, "The Market Valuation of Internet Channel Additions," *Journal of Marketing*, Vol. 66: 102-119, April 2002.
- Geyskens, I. and J. Steenkamp, "Economic and social satisfaction: Measurement and relevance to marketing channel relationships," *Journal of Retailing*, Vol. 76, No. 1: 11–32, 2000.
- Gregg, D.G. and S. Walczak, "E-commerce Auction Agents and Online-Auction Dynamics," *Electronic Markets*, Vol. 13, No. 3: 242-250, 2003.
- Grow, B. and I. Sager, "How Much Do I Hear for this Nurse?," Business Week, No. 3861: 14, 2003.
- Gupta, A., B. Su, and Z. Walter, "Risk profile and consumer shopping behavior in electronic and traditional channels," *Decision Support Systems*, Vol. 38, No. 3: 347-367, 2004.
- Hahn, J., "The Dynamics of Mass Online Marketplaces: A Case Study of an Online-Auction," *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, Seattle, WA, pp. 317-324, 2001.
- Hitt, L.M. and F.X. Frei, "Do Better Customers Utilize Electronic Distribution Channels? The Case of PC Banking," *Management Science*, Vol. 48, No. 6: 732-748, 2002.
- Indeok, S., R. Larose, M.S. Eastin, and C.A. Lin, "Internet Gratifications and Internet Addiction: On the Uses and Abuses of New Media," *CyberPsychology & Behavior*, Vol. 7, No. 4: 384-394, 2004.
- Ivanova-Stenzel, R. and T.C. Salmon, "Bidder Preferences among Auction Institutions," *Economic Inquiry*, Vol. 42, No. 2: 223-236, 2004.
- Judge, G.G., R.C. Hill, W.E. Griffiths, H. Lütkepohl, and T.C. Lee, *Introduction to the Theory and Practice of Econometrics 2nd Edition*, New York: Wiley, 1988.

- Kagel, J.H., and D. Levin, *Common Value Auctions and the Winner's Curse*, Princeton, NJ: Princeton University Press, 2002.
- Kauffman, R.J. and C.A. Wood, "Running Up the Bid: An Empirical Study of Seller Behavior in Internet Auctions," in: M. Chung (Ed.), *Proceedings of the 2000 Americas Conference on Information Systems (AMCIS-00)*. Long Beach, CA, pp. 929-935, 2000.
- Kazumori, E., "Selling Online Versus Offline: Theory and Evidences from Sotheby's," *EC 03 Proceedings of the 4th ACM Conference on Electronic Commerce*, pp. 125-134, 2003.
- Kazumori, E. and J. McMillan, "Selling Online Versus Live," White paper, Stanford, CA: Stanford University, Graduate School of Business, <u>http://www.gsb.stanford.edu/ CEBC/pdfs/sothebysmc0129.pdf</u>, 2003.
- Kettinger, W.J. and G. Hackbarth, "Integration of Electronic Commerce Networks into the Sales Processes of Small Firms," *Journal of Electronic Commerce Research*, Vol. 5, No. 3: 153-171, 2004.
- Klemperer, P., "Auction Theory: A Guide to the Literature," *Journal of Economic Surveys*, Vol. 13, No. 3: 227-286, 1999.
- Koh, J. and Y.G. Kim, "Sense of Virtual Community: A Conceptual Framework and Empirical Validation," International Journal of Electronic Commerce, Vol. 8, No. 2: 75-93, 2003.
- Komiak, S.X. and I. Benbasat, "Understanding Customer Trust in Agent-Mediated Electronic Commerce, Web-Mediated Electronic Commerce, and Traditional Commerce," *Information Technology and Management*, Vol. 5, No. 1-2: 181-207, 2004.
- Kramer, R.M., "Trust and distrust in organizations: Emerging perspectives, enduring questions," Annual Review of Psychology, Vol. 50: 569–598, 1999.
- Krishna, V., Auction Theory, San Diego, CA: Academic Press, 2002.
- Lang, J.C., "Social context and social capital as enablers of knowledge integration, *Journal of Knowledge Management*, Vol. 8, No. 3: 89-105, 2004.
- LaPelle, N., "Simplifying Qualitative Data Analysis Using General Purpose Software Tools," *Field Methods*, Vol. 16, No. 1: 85-108, 2004.
- Leary, M.R., A.L. Haupt, K.S. Strausser, and J.T. Chokel, "Calibrating the sociometer: The relationship between interpersonal appraisals and state self-esteem," *Journal of Personality and Social Psychology*, Vol. 74: 1290-1299, 1998.
- Lee, S., F. Zufryden, and X. Drèze, "A Study of Consumer Switching Behavior Across Internet Portal Sites," *International Journal of Electronic Commerce*, Vol. 7, No. 3: 39-63, 2003.
- Levin, A.M., I.P. Levin, and J.A. Weller, "A Mutli-Attribute Analysis of Preferences for Online and Offline Shopping: Differences Across Products, Consumers, and Shopping Stages," *Journal of Electronic Commerce Research*, Vol. 6, No. 4: 281-290, 2005.
- Lucking-Reiley, D.L., "Using Field Experiments to Test Equivalence Between Auction Formats: Magic on the Internet," *American Economic Review*, Vol. 89, No. 5: 1063-1080, 1999.
- Lucking-Reiley, D.L. "Auctions on the Internet: What's Being Auctioned, and How?," Journal of Industrial Economics, Vol. 48: 227–252, 2000.
- Maskin, E. and J. Riley, "Optimal multi-unit auctions," in: P. Klemperer (Ed.), *The Economic Theory of Auctions Vol. 2*. Camberley, UK: E. Elgar Publishing, pp. 312–336, 2000.
- Massad, V.J. and J.M. Tucker, "Comparing bidding and pricing between in-person and online auctions," *Journal of Product & Brand Management*, Vol. 9, No. 5: 325-332, 2000.
- Matsubara, S., "Accelerating Information Revelation in Ascending-bid Auctions: Avoiding Last Minute Bidding," *Proceedings of the 3rd ACM Conference on Electronic Commerce*, pp. 29-37, 2001.
- McDonald, A.B., "Auction Stores Do EBay Selling for You," PC World, Vol. 22, No. 9: 24-26, 2004.
- Mehta, K. and B. Lee, "An Empirical Evidence of Winner's Curse in Electronic Auctions," *Proceedings of the 20th International Conference on Information Systems*, pp. 465-471, 1999.
- Miles, M.B., "Qualitative Data as an Attractive Nuisance: The Problem of Analysis," Administrative Science Quarterly, Vol. 24, No. 4: 590-601, 1979.
- Milgrom, P. and R. Weber, "A theory of auctions and competitive bidding," Econometrica, Vol. 18: 155-162, 1982.
- Mishra, D.P., J.B.Heide, and S.G. Cort, "Information Asymmetry and Levels of Agency Relationships," *Journal of Marketing Research*, Vol. 35: 277-295, 1998.
- Ockenfels, A. and A.E. Roth, "The Timing of Bids in Internet Auctions: Market Design, Bidder Behavior, and Artificial Agents," *AI Magazine*, Vol. 23, No. 3: 79-87, 2002.
- Öörni, A., "Consumer search in electronic markets: an experimental analysis of travel services," *European Journal* of Information Systems, Vol. 12: 30-40, 2003.

- Park, S., "Website Usage and Sellers' Listing in Internet Auctions," White paper, Stony Brook, NY: SUNY at Stony Brook, <u>http://ms.cc.sunysb.edu/~sanpark/iauction.pdf</u>, 2002.
- Parkes, D.C., "Auction design with costly preference elicitation," *Annals of Mathematics and Artificial Intelligence*, Vol. 44, No. 3: 269-302, 2005.
- Pavlou, P.A., "Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model," *International Journal of Electronic Commerce*, Vol. 7, No. 3: 101-134, 2003.
- Pavlou, P.A. and M. Fygenson, "Understanding and Predicting Electronic Commerce Adoption: An Extension of the Theory of Planned Behavior," *Management Information Systems Quarterly*, Vol. 30, No. 1: 115-143, 2006.
- Pezanis-Christou, P., "On the impact of low-balling: Experimental results in asymmetric auctions," *International Journal of Game Theory*, Vol. 31, No. 1: 69-89, 2002.
- Pinker, E.J., A. Seidmann, and Y. Vakrat, "Managing Online Auctions: Current Business and Research Issues," *Management Science*, Vol. 49, No. 11: 1457-1484, 2003.
- Reinhardt, G. and M. Lévesque, "A New Entrant's Decision on Virtual Versus Bricks-and-Mortar Retailing," Journal of Electronic Commerce Research, Vol. 5, No. 3: 136-152, 2004.
- Resnick, P., R. Zeckhauser, E. Friedman, and K. Kuwabara, "Reputation Systems," *Communications of the ACM*, Vol. 43, No. 12: 45-48, 2000.
- Roth, A.E. and A. Ockenfels, "Last-Minute Bidding and the Rules for Ending Second-Price Auctions: Evidence from eBay and Amazon Auctions on the Internet," *American Economic Review*, Vol. 92, No. 4: 1093-1103, 2002.
- Salam, A.F., L. Iyer, P. Palvia, and R. Singh, "Trust in E-Commerce," *Communications of the ACM*, Vol. 48, No. 2: 73-77, 2005.
- Segev, A., C. Beam, and J.G. Shanthikumar, "Optimal Design of Internet-Based Auctions," *Information Technology* & *Management*, Vol. 2, No. 2: 121-163, 2001.
- Schindler, J., "Auctions with interdependent valuations: theoretical and empirical analysis, in particular of internet auctions," Unpublished dissertation, Vienna: Vienna University of Economics and Business Administration, 2003.
- Sheth, J.N., B.I. Newman, and B.L. Gross, "Why we buy what we buy: A theory of consumption values," *Journal of Business Research*, Vol. 22, No. 2: 159-170, 1991.
- Sincich, T., Business Statistics by Example 5th Edition, Upper Saddle River, NJ: Prentice Hall, pp.1200-1201, 1996.
- Siskos, C. and A. Stevenson, "The Secrets of Power Sellers," *Kiplinger's Personal Finance*, Vol. 57, No. 7: 73-75, 2003.
- Stafford, M.R. and B. Stern, "Consumer Bidding Behavior on Internet Auction Sites," International Journal of Electronic Commerce, Vol. 7, No. 1: 135-150, 2002.
- Strader, T.J. and S.N. Ramaswami, "The Value of Seller Trustworthiness in C2C Online Markets," *Communications* of the ACM, Vol. 45, No. 12: 45-49, 2002.
- Subirana, B. and P. Carvajal, "Transaction streams: theory and examples related to confidence in internet-based electronic commerce," *Journal of Information Technology*, Vol. 15: 3-16, 2000.
- Suh, B. and I. Han, "The Impact of Customer Trust and Perception of Security Control on the Acceptance of Electronic Commerce," *International Journal of Electronic Commerce*, Vol. 7, No. 3: 135-161, 2003.
- Teich, J., H. Wallenius, J. Wallenius and A. Zaitsev, "A Multiple Unit Auction Algorithm: Some Theory and a Web Implementation," *Electronic Markets*, Vol. 9, No. 3: 199-205, 1999.
- Tung, Y.A., R.D. Gopal, and A.B. Whinston, "Multiple Online Auctions," Computer, Vol. 36, No. 2: 100-102, 2003.
- Vaculik, J. "Bidding by the Bar: Online Auction Sites for Legal Services," *Texas Law Review*, Vol. 82, No. 2: 445-480, 2003.
- Van Heck, E. and P. Vervest, "How Should CIOs Deal With Web-Based Auctions?," *Communications of the ACM*, Vol. 41, No. 7: 99-100, 1998.
- Vincent, D.R., "Bidding off the wall: Why reserve prices may be kept secret," *Journal of Economic Theory*, Vol. 65, No. 2: 575-584, 1995.
- Vishwanath, A., "Manifestations of interpersonal trust in online interaction," *New Media & Society*, Vol. 6, No. 2: 219-235, 2004.
- Vulcano, G., G. van Ryzin, and C. Maglaras, "Optimal Dynamic Auctions for Revenue Management," *Management Science*, Vol. 48, No. 11: 1388-1407, 2002.
- Wang, R., "Auctions versus Posted-Price Selling," American Economic Review, Vol. 83, No. 4: 838-851, 1993.
- Wilcox, R.T., "Experts and amateurs: The role of experience in Internet auctions," *Marketing Letters*, Vol. 11, No. 4: 363-374, 2000.

- Wildberger, M., "Intelligent Agents in Auction Markets," *Modeling and Simulation*, Vol. 2, No. 1: available at: <u>http://www.modelingandsimulation.org/issue5/aiandsimulation2.html</u>, 2003.
- Wingfield, N., "Corporate sellers put the online auctioneer on even faster track," *Wall Street Journal*, Vol. 237, No. 107: A1,A6, 2001.
- Wolf, A., "eBay Beckons Dealers With Better Returns From Off-Inventory," TWICE (This Week in Consumer Electronics), Vol. 17, No. 14: 3,28, 2002a.
- Wolf, A., "Sellers Outsourcing eBay Biz to Online Auctioneers," TWICE (This Week in Consumer Electronics), Vol. 17, No. 14: 28, 2002b.
- Yager, R.R., "Modeling uncertainty using partial information," *Information Sciences*, Vol. 121, No. 3-4: 271-294, 1999.
- Yap, A.Y., "Enabling E-Commerce Growth Through the Social Construction of a Virtual Community's Culture," *Journal of Electronic Commerce Research*, Vol. 3, No. 4: 279-294, 2002.

APPENDIX A – EBAY AUCTION SELLER SURVEY Online Auction Seller Survey

These questions are designed to gain insights into what drives your auction selling decisions.

1. Which auction sites are you selling on currently? eBay□ Amazon□ Yahoo□ Other□ If you have sold at other auction sites, what other sites have you sold at?

If you are currently selling on more than one site, please answer the following: - Why do you choose to sell on more than a single site? What are the advantages of doing so?

2. Which auction sites have you sold on in the past?
eBay□ Amazon□ Yahoo□ Other□
If you have sold at other auction sites, what other sites have you sold at?

3. How long have you been a member of:

eBay: O not member O <1 mon O 1-3 mon O 3-6 mon O 6m-1y O 1-2 yr O 2-5 yr O >5 yr Yahoo: O not member O <1 mon O 1-3 mon O 3-6 mon O 6m-1y O 1-2 yr O 2-5 yr O >5 yr Yahoo: O not member O <1 mon O 1-3 mon O 3-6 mon O 6m-1y O 1-2 yr O 2-5 yr O >5 yr Yahoo: O not member O <1 mon O 1-3 mon O 3-6 mon O 6m-1y O 1-2 yr O 2-5 yr O >5 yr Yahoo: O not member O <1 mon O 1-3 mon O 3-6 mon O 6m-1y O 1-2 yr O 2-5 yr O >5 yr Yahoo: O not member O <1 mon O 1-3 mon O 3-6 mon O 6m-1y O 1-2 yr O 2-5 yr O >5 yr Yahoo: O not member O <1 mon O 1-3 mon O 3-6 mon O 6m-1y O 1-2 yr O 2-5 yr O >5 yr Yahoo: O not member O <1 mon O 1-3 mon O 3-6 mon O 6m-1y O 1-2 yr O 2-5 yr O 2-5 yr O >5 yr

4. What is your buyer/seller rating on:

 eBay:
 O not member O <5 O 5-10</td>
 O11-50
 O51-100
 O101-500
 O 501-1000
 O1001-5000
 O>5000

 Amazon:
 O not member O <5 O 5-10</td>
 O11-50
 O51-100
 O101-500
 O 501-1000
 O1001-5000
 O>5000

 Yahoo:
 O not member O <5 O 5-10</td>
 O11-50
 O51-100
 O101-500
 O 501-1000
 O1001-5000
 O>5000

- 5. How did you first learn about eBay's online auction site?
 - O from an Internet ad
 - O from TV ad
 - O from a friend or other personal source
 - O Other (please specify):
 - O I was not aware until now that eBay had an online auction site

- 6. How did you first learn about Amazon's online auction site?
 - O from an Internet ad
 - O from TV ad
 - O from a friend or other personal source
 - O Other (please specify):
 - O I was not aware until now that eBay had an online auction site
- 7. How did you first learn about Yahoo's online auction site?
 - O from an Internet ad
 - O from TV ad
 - O from a friend or other personal source
 - O Other (please specify):
 - O I was not aware until now that eBay had an online auction site
- 8. Please rate the importance of the qualities you look for in choosing an online auction site by placing the number 1-5 before each of the qualities identified below.

1 = 1 2 = 0 3 = 1 4 = 0 5 = 0	not at only s mode quite extrer	all in lightl rately impo nely i	nporta y imp / imp rtant impoi	ant oortant ortant rtant	
1 o	2 o	3 o	4 o	5 o	<i>reputation/recommendation</i> – site has been recommended to me by sources I trust
1 o	2 o	3 o	4 o	5 o	$\mathit{name\ recognition}-site\ has\ a\ high\ profile\ name,\ one\ that\ many\ are\ familiar\ with$
1 o	2 0	3 o	4 o	5 o	trust - trust in the organization operating the site
1 o	2 0	3 o	4 o	5 o	traffic – site attracts the maximum number of hits
1 o	2 0	3 o	4 o	5 o	bid amount - highest average bids
1 o	2 0	3 o	4 o	5 o	target market - site attracts the type of customer I'm looking for
1 o	2 o	3 o	4 o	5 o	<i>integrity/responsiveness</i> – site has a reputation for being problem free or fixing problems promptly
1 o	2 0	3 o	4 o	5 o	rates - site charges minimum to post items for sale
1 o	2 o	3 o	4 o	5 o	<i>security</i> – site has a reputation for being a secure site that reassures customers

9. Which 2 (?) of the following characteristics are most important to you in choosing an online auction site (Rank 1 & 2)?

- 1 o 2 o reputation/recommendation site has been recommended to me by sources I trust
- 1 o 2 o name recognition site has a high profile name, one that many are familiar with
- 1 o 2 o trust trust in the organization operating the site
- 1 o 2 o traffic site attracts the maximum number of hits
- 1 o 2 o bid amount highest average bids
- 1 o 2 o *target market* site attracts the type of customer I'm looking for
- 1 o 2 o integrity/responsiveness site has a reputation for being problem free or fixing problems promptly
- 1 o 2 o *rates* site charges minimum to post items for sale
- 1 o 2 o security site has a reputation for being a secure site that reassures customers

Please evaluate each of the following online auction sites on the various characteristics by placing a numeric value in the appropriate box:

1 = Definitely Not True 2 = Mostly Not True 3 = Slightly True 4 = Mostly True 5 = Definitely True

		12345
10 Has a good reputation	eBay:	00000
To: Thas a good reputation	Amazon:	00000
	Yahoo:	00000
		12345
11. Has strong name recognition	eBay:	00000
	Amazon:	00000
	Yahoo:	00000
		12345
12. Organization is trustworthy	eBav [.]	00000
	Amazon.	00000
	Yahoo:	
	ranoo.	40045
13 Attracts high traffic/hits	• D • · · ·	12345
	евау:	00000
	Amazon:	00000
	ranoo:	00000
		12345
14. Has the high average bids	eBay:	00000
	Amazon:	00000
	Yahoo:	00000
		12345
15. Attracts good customers	eBay:	00000
	Amazon:	00000
	Yahoo:	00000
		12345
	eBav:	00000
16. Responsive to fixing problems	Amazon:	00000
	Yahoo:	00000
		10015
17. Has the best rates	oBoy:	12345
	Amazon:	00000
	Vahoo:	00000
	1 anou.	
18 ls secure	_	12345
	eBay:	00000
	Amazon:	00000
	Yahoo:	00000

19. What made you decide to sell on an online auction site?

20. Why did you choose the auction site(s) you sell on?

- 21. How would you characterize yourself?
 - O casual seller one who sells a few items on occasion
 - O regular seller one who sells items on a regular basis but not as a primary source of income
 - O professional seller one who sells full time and may use online auctions as a primary source of income
 - O business extension seller online auctions are an extension of my regular business that is not online
- 22. Gender: $M \circ F \circ$
- 23. What age are you? 17 or younger o 18-22 o 23-29 o 30-39 o 40-49 o 50-59 o 60-69 o 70 or older o
- 24. Education check highest level attained
 - o some high school
 - o high school graduate or equivalent
 - \circ some college
 - o college graduate

o some graduate work
o Master's Degree
o Ph.D./Ed.D./Psy.D.
o J.D. or M.D.

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